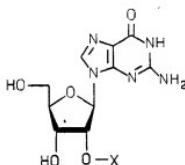


**ABSTRACT**

Novel 2'-O-alkyl guanosine compounds are provided. In accordance with preferred embodiments compounds having the structure:



wherein X is  $R_1-(R_2)_n$ ;

$R_1$  is  $C_1-C_{20}$  alkyl,  $C_4-C_{20}$  alkenyl or  $C_2-C_{20}$  alkynyl;

$R_2$  is halogen, hydroxyl, thiol, keto, carboxyl, nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, S-alkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl, S-aralkyl, NH-aralkyl, amino, N-phthalimido, imidazole, azido, hydrazino, hydroxylamino, isocyanato, sulf oxide, sulfone, sulfide, disulfide, silyl, aryl, heterocycle, carbocycle, intercalator, reporter molecule, conjugate, poly amine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides; and

$n$  is an integer from 0 to about 6, are provided.